# CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Upper Big Hole LLC Ditch and Headgate LUL

**Proposed** 

Implementation Date: January 2013
Proponent: Upper Big Hole LLC

**Location:** Section 16, Township 6 South – Range 15 West

County: Beaverhead County

# I. TYPE AND PURPOSE OF ACTION

Upper Big Hole LLC ranch, the USFWS and the FWP would like to replace two head gates on state land that feed Company and Kirk ditches with water from the Big Hole River near Jackson Montana. Work would include stabilizing stream banks with rock and native vegetation. They would also remove substrate to facilitate flow away from stream banks and create high flow channels with native vegetation. This proposal is also for a license to use Company and Kirk ditch's on state land for irrigated pasture land on Upper Big Hole LLC lands.

## II. PROJECT DEVELOPMENT

## 1. PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED:

Provide a brief chronology of the scoping and ongoing involvement for this project.

The DNRC was approached by fisheries biologist Jim Magee who works for the USFW services Partners Program in Dillon about replacing the head gate that Upper Big Hole LLC ranch owns and uses to irrigate their deeded property using water from the Upper Big Hole River. The use of the water is for irrigated pasture land. The headgate is located on state land; Upper Big Hole LLC owns the water rights, but doesn't have a LUL for use of two ditches that are located on state land. The current head gates are in disrepair and could fail. This would allow the Big Hole River to flow down the existing ditches instead of in the river banks which could cause many problems for the native fish in the river and possible erosion problems in and along the ditches.

The following people were contacted and are involved with this project;

Jim Magee, Fisheries Biologist with the USFWS Jim Olson, Fisheries Biologist with the MT FWP The Beaverhead Conservation District Army Corps of Engineers MT DEQ Jackson Ranches the Lessee of the state land. Patrick Rennie MT DNRC Archeologist NRIS Natural Heritage Society

## 2. OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:

124 Permit from MT FWP
404 Permit from the Army Corps of Engineers
318 Permit MT DEQ

All Permits have been secured and are in place.

# 3. ALTERNATIVES CONSIDERED:

- **A.** Grant Upper Big Hole LLC a Land Use License (LUL) to work on the headgates that feed Company, and Kirk Ditch on state land, as well as the use of the ditches for irrigation purposes.
- **B.** Deny Upper Big Hole LLC a Land Use License (LUL) to work on the headgates that feed Company, and Kirk Ditch on state land, as well as the use of the ditches for irrigation purposes.

# III. IMPACTS ON THE PHYSICAL ENVIRONMENT

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

## 4. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE:

Consider the presence of fragile, compactable or unstable soils. Identify unusual geologic features. Specify any special reclamation considerations. Identify any cumulative impacts to soils.

Design of the headgates will meet the standards set forth by the MT FWP and the Beaverhead Conservation District and the USFWS. Impacts to soils will be minor and disturbed areas will be seeded with an appropriate mix of grass seed. No long term or cumulative effects to soils are anticipated.

# 5. WATER QUALITY, QUANTITY AND DISTRIBUTION:

Identify important surface or groundwater resources. Consider the potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality. Identify cumulative effects to water resources.

This proposal would help insure the water quality of the Big Hole River by preventing the river from capturing the ditch and will direct flows away from the irrigation infrastructure that is currently in place. The proposal and permits require the contractor to limit any in-stream work and avoid unnecessary impacts to the river. Precautions should be taken to preserve existing riparian vegetation, stream turbidity should be minimized and no equipment will be allowed into the river.

#### 6. AIR QUALITY:

What pollutants or particulate would be produced? Identify air quality regulations or zones (e.g. Class I air shed) the project would influence. Identify cumulative effects to air quality.

This project would have no long term or cumulative impacts to air quality. The Big Hole Valley is not located within a non-attainment zone and is only lightly populated with good air flow and dispersion.

# 7. VEGETATION COVER, QUANTITY AND QUALITY:

What changes would the action cause to vegetative communities? Consider rare plants or cover types that would be affected. Identify cumulative effects to vegetation.

This project will take place within the riparian area where the majority of the vegetation is willows and sedges. Work will be done to minimize riparian vegetation disturbance and native grass seed will be broadcast seeded in disturbed areas. No long term or cumulative impacts are anticipated to vegetative cover.

#### 8. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS:

Consider substantial habitat values and use of the area by wildlife, birds or fish. Identify cumulative effects to fish and wildlife.

The area of the proposal is in a riparian zone along the Big Hole River. This area has substantial habitat values and use by a variety of wildlife, birds and fish. The proposal would be of short duration and affect only a small area within the Rig Hole river corridor so no cumulative or long term impacts are anticipated. The USWS is

concerned that the current diversion structure is in poor enough condition that a high runoff event could cause the ditch to be overtaken causing extensive erosion and other problems to the Big Hole River and State Land.

# 9. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES:

Consider any federally listed threatened or endangered species or habitat identified in the project area. Determine effects to wetlands. Consider Sensitive Species or Species of special concern. Identify cumulative effects to these species and their habitat.

An NRIS search of the area didn't reveal any sensitive, threatened or endangered species in the vicinity of the project. No long term or cumulative impacts would be expected if the proposal takes place.

#### 10. HISTORICAL AND ARCHAEOLOGICAL SITES:

Identify and determine effects to historical, archaeological or paleontological resources.

MT DNRC Archeologist Patrick Renee noted that he didn't have any cultural resource concerns with replacement of the headgates.

#### 11. AESTHETICS:

Determine if the project is located on a prominent topographic feature, or may be visible from populated or scenic areas. What level of noise, light or visual change would be produced? Identify cumulative effects to aesthetics.

The proposal should not affect the aesthetics of the area. The ditches and headgates have been in place for years and the replacement of the headgates should have no significant impacts to the area. The amount of disturbance will be small and of short duration.

## 12. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY:

Determine the amount of limited resources the project would require. Identify other activities nearby that the project would affect. Identify cumulative effects to environmental resources.

By not allowing this project to take place there could be significant environmental consequences to the ditch and river. The area around the ditch could sustain serious erosion problems if the Big Hole River would take it over. It could also have possible effects on the Arctic grayling that are found in the river as well as other fish species.

## 13. OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA:

List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.

No other projects, plans, actions, or analysis were identified during the scoping process for this particular area.

# IV. IMPACTS ON THE HUMAN POPULATION

- RESOURCES potentially impacted are listed on the form, followed by common issues that would be considered.
- Explain POTENTIAL IMPACTS AND MITIGATIONS following each resource heading.
- Enter "NONE" If no impacts are identified or the resource is not present.

# 14. HUMAN HEALTH AND SAFETY:

Identify any health and safety risks posed by the project.

No health or safety risks or concerns were identify or posed by this proposal.

#### 15. INDUSTRIAL, COMMERCIAL AND AGRICULTURE ACTIVITIES AND PRODUCTION:

Identify how the project would add to or alter these activities.

This proposal will not have any affects on industrial, commercial and agricultural activities or production.

## 16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT:

Estimate the number of jobs the project would create, move or eliminate. Identify cumulative effects to the employment market.

This proposal will have no long term or cumulative impacts on employment in the area.

#### 17. LOCAL AND STATE TAX BASE AND TAX REVENUES:

Estimate tax revenue the project would create or eliminate. Identify cumulative effects to taxes and revenue.

This proposal will not have any long term or cumulative impacts on the local or state tax base or revenues.

#### 18. DEMAND FOR GOVERNMENT SERVICES:

Estimate increases in traffic and changes to traffic patterns. What changes would be needed to fire protection, police, schools, etc.? Identify cumulative effects of this and other projects on government services.

This proposal will not increase demand for government services.

#### 19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:

List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.

There aren't any local, county, state, or federal zoning or management plans identified during the scoping for this project.

## 20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES:

Identify any wilderness or recreational areas nearby or access routes through this tract. Determine the effects of the project on recreational potential within the tract. Identify cumulative effects to recreational and wilderness activities.

The proposal will not affect any wilderness or recreational activities in the area.

## 21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING:

Estimate population changes and additional housing the project would require. Identify cumulative effects to population and housing.

The proposal will not affect density or distribution of population or housing in the Big Hole River area.

#### 22. SOCIAL STRUCTURES AND MORES:

Identify potential disruption of native or traditional lifestyles or communities.

The proposal fits in with the current culture and traditional lifestyles in this area of the state.

## 23. CULTURAL UNIQUENESS AND DIVERSITY:

How would the action affect any unique quality of the area?

The proposal fits in with the current culture and traditional lifestyles in this area of the state and would not affect any uniqueness of the area.

# 24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:

Estimate the return to the trust. Include appropriate economic analysis. Identify potential future uses for the analysis area other than existing management. Identify cumulative economic and social effects likely to occur as a result of the proposed action.

The proposal will generate \$300.00/ ten year period to repair the headgate and use of the ditches on state land.					
	EA Checklist Prepared By:	Name:	Timothy Egan  Dillon Unit Manager	Date:	12/18/12
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V. FINDING					
25. ALTERNATIVE SELECTED:					
Issue Land Use License to authorize headgate replacement and ditch use.					
26. SIGNIFICANCE OF POTENTIAL IMPACTS:					
Significant impacts are not anticipated as a result of the proposed activity. Operations are to be conducted in compliance with all regulatory permits which have been acquired. The authorized activities would allow use which has occurred for many years and is intended to reduce the risk of erosion potential and subsequent water quality impact.					
27. NEED FOR FURTHER ENVIRONMENTAL ANALYSIS:					
	EIS		More Detailed EA	X No Furthe	er Analysis
	EA Checklist Approved By: Name: Garry Williams Title: Area manager Central Land Office				
	Signature:	6-7	nulla	<b>Date</b> : 12	/18/12

# Upper Big Hole LLC Headgate Replacement Project Section 16, Township 6 South - Range 15 West

